

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An apparatus, comprising:
a ~~microcode configuration~~ module to store ~~microcode configuration~~ information including instructions to reconfigure one or more hardware elements, the microcode module comprises microcode memory to store mask data, compare data, branch addresses and field types; and
a hardware-based parsing module to connect to said ~~microcode configuration~~ module, said parsing module comprising a microcode sequencer configured to use mask and compare data to decode field types in a received frame of information to determine a frame format associated with said frame, retrieve ~~microcode configuration~~ information corresponding to said frame format, and reconfigure a set of hardware elements to parse said frame based on the retrieved ~~configuration information and based on~~ microcode information from the ~~the~~ ~~[[a]]~~ microcode module.
2. (Original) The apparatus of claim 1, wherein said parsing module outputs a field type for said frame.
3. (Canceled)
4. (Canceled)
5. (Canceled)

6. (Currently Amended) The apparatus of claim [[5]]1, further comprising a delay line module to buffer said frame during said frame parsing.
7. (Canceled)
8. (Canceled)
9. (Currently Amended) The apparatus of claim [[8]]1, further comprising a delay line module to buffer said frame during said frame parsing.
10. (Currently Amended) A system, comprising:
 - at least one base station to communicate frames of information using a plurality of different frame formats; and
 - a mobile station to receive said frames of information, said mobile station comprising a receiver to receive and process said frames, said receiver comprising a reconfigurable hardware-based frame parser comprising a microcode configuration module to store microcode configuration information including instructions to reconfigure one or more hardware elements, the microcode module comprises microcode memory to store mask data, compare data, branch addresses and field types, and a parsing module to connect to said microcode configuration module, said parsing module comprising a microcode sequencer configured to use mask and compare data to decode field types in a received frame of information to determine a frame format associated with said frame, retrieve microcode configuration information corresponding to said frame format, and reconfigure a set of hardware elements to parse said frame in accordance with said different frame formats and the retrieved configuration information ~~and based on~~ microcode information from the [[a]] microcode module.
11. (Original) The system of claim 10, wherein said receiver comprises:
 - a power amplifier;
 - an RF/IF converter to connect to said power amplifier;

an IQ module to connect to said RF/IF converter;
a baseband processor to connect to said IQ module; and
a media access controller to connect to said baseband processor.

12. (Previously Presented) The system of claim 11, wherein said media access controller comprises said reconfigurable hardware-based frame parser.

13. (Canceled)

14. (Previously Presented) The system of claim 10, further comprising a delay line module to buffer said frame during said frame parsing.

15. (Currently Amended) A method to perform frame parsing, comprising:
receiving a frame of information;
determining a frame format associated with said frame using mask and compare data to decode field types for the frame;
retrieving microcode configuration information from a microcode configuration module corresponding to said frame format, the microcode configuration information including instructions to reconfigure one or more hardware elements and the microcode module comprising a microcode memory to store mask data, compare data, branch addresses and field types;
reconfiguring a parsing module, comprising a microcode sequencer, to parse said frame of information using said ~~configuration information~~ and microcode information from the [[a]] microcode module; and
parsing said frame for frame format information using said reconfigured parsing module.

16. (Canceled)

17. (Canceled)

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18. (Canceled)

19. (Original) The method of claim 15, further comprising delaying said frame until said frame format information is parsed.